

Impact Case Study

Using Achieving Reliable Care for Safety (ARCS) as a Diagnostic Tool with the Emergency Department at Barnsley Hospital

ARCS is an evidence-based approach to the planning and delivery of patient care. ARCS aims to improve reliability of patients getting what they need when they need it, putting the patient and their needs at the heart of delivering good quality, safe care.

In April 2018 Barnsley Hospital had successfully implemented a number of Urgent and Emergency Care projects which aimed to alleviate pressure within the ED, but none focused on improving processes within the department. The Improvement Academy was invited to work with the ED team on a unique project to test and use the ARCS tool to understand the causes of delay which impact on patient safety.

Diagnosing Delays in Care

The Improvement Academy, using the guiding principles of ARCS, helped members of the multidisciplinary ED team to describe a safe quality standard of care that they felt represented a safe pathway for all patients visiting their ED. This became the gold standard that represents what the team believes is the best quality care for their patients.

Initial Assessment15 mins35 mins60 mins90 mins120 mins	Initial Investigations	Nursing Assessment Medical Assessment	X-ray (s) and / or CT(s) ordered and completed (if required)	Treatment initiated Decision to admit made Specialty opinion requested (if required) Discharge home	For patients being admitted: Specialty opinion is given (if requested) Bed is ready Transfer to ward
150 mins					

Figure 1: The Barnsley Gold Standard: What does 'safe' look like?

As part of the diagnostic phase, we used Barnsley's Gold Standard safe care pathway to track and compare the actual journeys for patients attending the department, enabling delays to providing quality care to be seen and known.



Figure 2: Pareto chart of causes of delay for patients attending Barnsley Hospital ED

A total of 148 patients were followed through the pathway and we were able to identify 410 delays in care. The greatest delay observed (fig 2) was patients' accessing timely medical assessment. These delays could be seen to cause knock-on delays that resulted in 47 delays in discharge and 63 delays in transfer of patients from the ED.

Impact

These delays in patient care, alongside measures of patient experience, staff culture and teamworking formed the baseline data to support and enable the ED team to improve the safety of patients in their care.

The Improvement Academy supported the team to test cycles of change focusing on having a Consultant at triage. Testing evolved over time to design a new process which involved the patient's journey being overseen by a multidisciplinary team working as a 'pod'. The Pod included a Consultant, Healthcare Assistant (HCA) and an Advanced Nurse Practitioner (ANP). In this process the patient is triaged by the Consultant while the HCA completes initial investigations, the medical plan is then completed by the ANP.



Figure 3: SPC chart showing a comparison of before and after 'Pod' testing

A comparison between patients that were triaged by a Consultant during testing to those whose journey was overseen by the Pod shows a significant improvement in time from arrival to admission, from 210 minutes to 177 (fig 3). Overall, throughout our testing, having a Consultant triaging patients significantly reduced the average times that the patients waited for medical assessment and time to discharge home (fig 4).



